Procedure Title: Procedure for Documenting Lessons Learned/Best Practice Tips
Procedure Number: TO001-SPI-03

1.0   IDENTIFICATION

Project: All		
Procedure: Procedure for Documenting Lessons Learned/Best Practice Tips		
Procedure Number: TO001-SPI-03	**System:** All	**Effective Date**: September 30, 2000

2.0   PURPOSE

This procedure describes the process for documenting experience gained during project planning and implementation by using the attached "Lessons Learned/Best Practice Tips" template. The goal of this procedure is to improve the Systems Development Center (SDC) software process, resulting in deliverable products that fully meet Environmental Protection Agency (EPA) requirements, meet or exceed customer expectations, and adhere to cost and schedule constraints. Submissions judged to have a significant impact on software process improvement will be reviewed by the Development and Maintenance Methodology Group (DMMG)/Systems Engineering Environment (SEE) Group and inserted in the SDC Process Asset Library (PAL). Future submissions will include business, administration, and facilities.

3.0   RESPONSIBILITY

SDC Employees and Subcontractors:

C   Submit lessons learned/best practice tips to the DMMG PAL Administrator as they occur during the course of the project or other business activities. Use the attached template.

DMMG:

C   Process and determine the disposition of Lessons Learned/Best Practice Tips submissions.
C   Prepare and process Lessons Learned/Best Practice Tips.

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4.0   INPUTS

C   SDC Standard Software Process as documented in the SDC SEE.
C   EPA Task Orders, including the Statement of Work (SOW) and EPA approved Project
        Plan.
C   Current Work Breakdown Schedule.
C   Current Technical Guidance, including Change Control Board (CCB) minutes.

5.0   RECOMMENDED TOOLS

C   Tools approved for project use, particularly tracking and metrics tools.

6.0   ENTRY CRITERIA

C   Occurrence of events or development of procedures that have either a beneficial or
        adverse effect on product development and delivery.

7.0   ACTIVITIES

•   **TPL or other designated author** prepares the attached Lessons Learned/Best Practice
        Tips template submission as follows:

C   Fill in the identifying information in the top section of the template (Date, TO Number,
        etc).

C   Assign a unique project or SDC Division file number (e.g., TO 01-01-00) for each lesson
        learned and/or best practice tip being submitted on this template. Purpose of this number
        is to enable each project to maintain useful documentation regardless of PAL disposition.

C   Check the SDC Process Category boxes that best describe the scope and context of the
        submission. Consult the PAL User Guide and Table of Contents to determine a good fit
        with pertinent PAL software process categories and topics.

C   **Background Section.** Provide a concise statement of the scope, life cycle phase, and
        context of the submission. Refer to SEE and other organizational level documents that

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provide relevant guidance for implementation of the process(es).

C **Issue\Problem\Opportunity Section.** Briefly describe the activities that led to identification of the issue\problem\opportunity that is being reported. Define the nature of the item being reported, and summarize the resulting SDC actions taken to deal with the item. In this description it is important to distinguish between facts and perceptions, and to avoid comments on individual performance. Focus on the process, not the personalities of those involved.

C **Outcomes Section.** Report what results were (1) expected, and (2) obtained from the actions taken to resolve the problem or exploit the opportunity. Explain how the various interactions influenced the outcome, and identify any critical deficiencies in the processes being used.

C **Lessons Learned/Best Practice Tips Section.** Summarize the experience gained during process implementation, in terms of actions taken to improve the process, reduce risk, or obtain necessary resources to deliver the product. If new technology is involved, provide a summary of the expected cost savings and/or increase in productivity that was achieved.

2. **TPL** reviews and discusses lessons learned /best practice tips within the project and with the Product Assurance (PA) lead and Assistant Program Manager (APM) if appropriate. Submit the completed template soft copy to the DMMG via email for review and comment.

3. **DMMG** reviews the submission and assigns appropriate follow-up action. Origination or modification of any SDC SEE elements must be within the scope of TO 001 cost and schedule. Any recommendations that may impact project cost and schedule must be addressed via a CCB. Submissions having potential for incorporation in the PAL will be reviewed by the DMMG Director for final approval

4. **DMMG** reviews follow-up action. If the document is approved for the PAL, DMMG assigns a PAL file name and enters the template in the PAL.

8.0 OUTPUTS

C Complete and review template, including disposition instructions.

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9.0   EXIT CRITERIA

C   DMMG promulgates the disposition of the Lessons Learned/Best Practice tips document.

10.0   METRICS

C   Reports entered in the PAL will be included in the PAL metrics.

Attachment:
Lessons Learned/Best Practice Tips Template

Date:	TO Number:	TO Title:
Subject:		
Point of Contact:		**Phone:**

Please check below the SDC DISCIPLINE and Process Category boxes that pertain to this writeup. Check more than one category if appropriate.

DEVELOPMENT		MANAGEMENT		PRODUCT ASSURANCE	
	Requirements		Administration		Quality Assurance
	Design/Architecture		Project Planning		Configuration Management
	Coding / Programming		Project Tracking, Oversight		Verification & Validation
	Testing (Unit, Integration, System)		Metrics		Test & Evaluation
	Building, Installing Software		Requirements Management		Project Reviews, Audits
	User Training		Integrated Software Management		**MISCELLANEOUS**
	Maintenance Support		Intergroup Coordination		Communications
	System Documentation		Software Process Improvement		Customer Relations
	Software Product Engineering		Process Training Program		Employee Relations
			Subcontractor Management		Work Environment
					Project Hardware, Software
					SDC Template or Form

NOTE: See the PAL User Guide/TOCs for a list of applicable Topics in each Process Category shown above (e.g., Project Planning: Handling Project Plan - SOW Deviations).

	Other (Fill in)

C **Background**	
C Describe task, life cycle phase and processes Involved.	
C List pertinent References, Documents (SEE, ADPE, Project level)	

C **Issue / Problem / Opportunity**	
C Describe the Issue\ Problem\ Opportunity that arose.	

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C Summarize the SDC problem appraisal, expectations, proposed actions	
C Outcomes	
C Describe the scenario - -what happened?	
C What worked well?	
C What went wrong?	
C Lessons Learned \ Best Practice Tips	
C How can we fix the problem or improve the process?	
C Who should take the lead? Assist?	
C Other Recommendations (New or Mod ADPE, SDC Operating Procedure, etc.)	
C SDC Follow-up Action	
C Action/ Responsibility	

Comments: